ANOTHER ALIEN IN THE CALIFORNIA FLORA

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It has taken a second "encounter" in which an inordinate amount of time was spent tracking down a crucifer that appeared to be native to the California flora to convince me that all alien plants growing without cultivation should be recorded and made known in some way. Had I done so in 1954 when an Aubrietia was first determined to genus and tentatively identified as to species from specimens collected on Hull Mountain near the border of Lake and Mendocino counties, California, by Rimo Bacigalupi and G. Thomas Robbins, it would have saved both me and Thomas W. Nelson of Humboldt State University a lot of time and effort. The first time around, material in fruit was sent from Berkeley as a Draba to C. L. Hitchcock for identification but since the plants were not of that genus, specimens eventually came to me. Clearly the plants were of no known genus of the Cruciferae native to California, although there were certain features resembling Draba and others reminding me of Arabis parishii of southern California. However, flowering specimens were essential to work out a positive identification even to genus. Bacigalupi and Robbins went back to the summit of Hull Mountain on June 7, 1955, and collected good flowering specimens. With these in hand, it was possible to say Aubrietia with certainty and give the probable full identity as Aubrietia deltoidea (L.) DC. (?), and it was left at that.

The next episode for me began in early 1980 when specimens in fruit of an unknown crucifer tentatively placed in *Lesquerella* were sent for identification. These were collected at the top of Hull Mountain on July 14, 1977 by J. P. Smith, J. O. Sawyer, and T. W. Nelson. Having forgotten about the earlier encounter with *Aubrietia* posing as a native, and knowing full well the specimens were not *Lesquerella*, I asked for flowering material thinking something new in the native flora had been discovered. A trip to the site for flowering specimens was made by Tom Nelson, and again with the specimens he obtained available for comparison, their identity as *Aubrietia* was made with certainty.

¹Results presented in this paper were obtained through support by grant GEB 78-08766 from the National Science Foundation.

How did Aubrietia get to the top of Hull Mountain at an elevation of about 6,800 ft? There is a forest fire look-out station there. Possibly someone deliberately scattered seeds at the site. In any case, the plants are growing without cultivation in crevices of "tight-fitting" scree and around rocks, habitats not unlike those where several species of Aubrietia grow natively in the eastern Mediterranean region of Europe.

Aubrietia deltoidea is the source of a number of cultivars and is grown in rock gardens and borders. It is naturalized in western Europe and elsewhere and it would be a good candidate to become naturalized in North America. However, the Hull Mountain specimens do not fully accord with native material of A. deltoidea in at least two respects. The siliques are densely and uniformly covered with minute dendritic trichomes in the Hull Mountain material whereas in A. deltoidea there is a mixture of large, mostly bulbous based, simple or forked trichomes and minute dentritic ones. This feature is used in keys to separate A. deltoidea from other species. A second difference is in the leaves. In A. deltoidea, the leaves are obovate or deltoid in outline and are dentate with two to several broad teeth. The Hull Mountain material has mostly entire, oblong to oblanceolate leaves. The cultivars of A. deltoidea show that the species is quite variable and a number of relatively divergent types have been developed for cultivation. If, as I suspect, the Hull Mountain population arose from a cultivar source, the differences from wild specimens of A. deltoidea are explainable. For the present, it seems best to refer the California specimens to A. deltoidea (L.) DC. without attempting to find out to which variety or cultivar they are most comparable. At the same time, the possibility that some other species of Aubrietia may be represented should be kept in mind.

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